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John Housler

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EXAMINER

BUTLER, PATRICK NEAL

ART UNIT

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Response to Arguments

Applicant's arguments filed 07 May 2008 have been fully considered but they are not persuasive.

Applicant argues with respect to the 35 § USC 102(b) rejections.

Applicant's arguments appear to be on the grounds that:

1) Langdon does not teach that the molten polymer extruded onto the support layer is integrated into fibrous or filamentary network of the support layer.

Applicant argues with respect to the 35 § USC 103(a) rejections.

Applicant's arguments appear to be on the grounds that:

2) Wright's vacuum foraminous vacuum belt 114 does not equate to a three-dimensional image transfer device because the fibers are only collected on the surface.

3) Wright's multilayer structure clarifies that the layers are not integrated into each other.

4) Hartman's method of forming a grid-like structure would not be employed in Wright since Wright requires diversity within the material to the extent of providing improved tenacity in one direction.

The Applicant's arguments are addressed as follows:

1) Langdon teaches extruding molten resin 205 from a conventional extruder 104 onto the nonwoven web 202 and using suction great enough to aperture the nonwoven and molten resin web in the areas coinciding with the capillaries 140 so that the resultant macroscopically expanded web 207 is generated (see col. 11, line 50 through col. 12, line 11; col. 5, lines 27-67; and

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figs. 3 and 7). Thus, the molten polymer is integrated into the fibrous or filamentary network because it passes through the network to the back of the composite structure and is united (see Mish, *Merriam-Webster's Collegiate Dictionary*, page 608, **integrate 1**: to form, coordinate, or blend into a functioning or unified whole : UNITE **3 a**: to unite with something else).

2) Wright collects extruded fibers 126 over a foraminous endless belt 114 (see col. 11, lines 1-14 and 27-54) having vacuum boxes holding material to the belt 114 (see col. 11, lines 43-45). Since fibers and filaments are pressed against the belt's foraminous surface by the vacuum, the belt's holes would necessarily be reflected in the composite material via their influence on the fibers' collection.

3) Wright's layers are extruded fibers 126 to a surface of elastomeric filaments 118 (see col. 11, lines 1-14 and 27-54). Thus, the layers do not provide smooth bonding surfaces. Since Wright's layers are formed by attaching extruded fibers 126 to a surface of elastomeric filaments 118 via vacuum (see col. 11, lines 1-14 and 27-54), the joining of adjacent layers between the surface fibers of each layer constitutes that the molten polymer extruded onto the support layer is integrated into fibrous or filamentary network of the support layer.

4) Hartman teaches using a drum 70 with pyramid-like projections 74 for collection of an extruded nonwoven (see Hartman, col. 7, line 46 through col. 8, line 19). Hartman provides no indication that the drum would not allow providing higher tenacity in one direction. Moreover, Hartman's drum surface allows

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continuous laying of fibers in one direction (see Fig. 11), which would provide a route for Wright's layer's directional tenacity.

4) Moreover, providing a composite in the shape of a mesh or woven- or knit-like pattern (see Hartman, col. 7, lines 46-48) would be the motivation to combine Wright and Hartman as described in the Office Action of 25 March 2008.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patrick Butler whose telephone number is (571) 272-8517. The examiner can normally be reached on Mon.-Thu. 7:30 a.m.-5 p.m. and alternating Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christina Johnson can be reached on (571) 272-1176. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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/P. B./
Examiner, Art Unit 1791

/Monica A Huson/
Primary Examiner, Art Unit 1791